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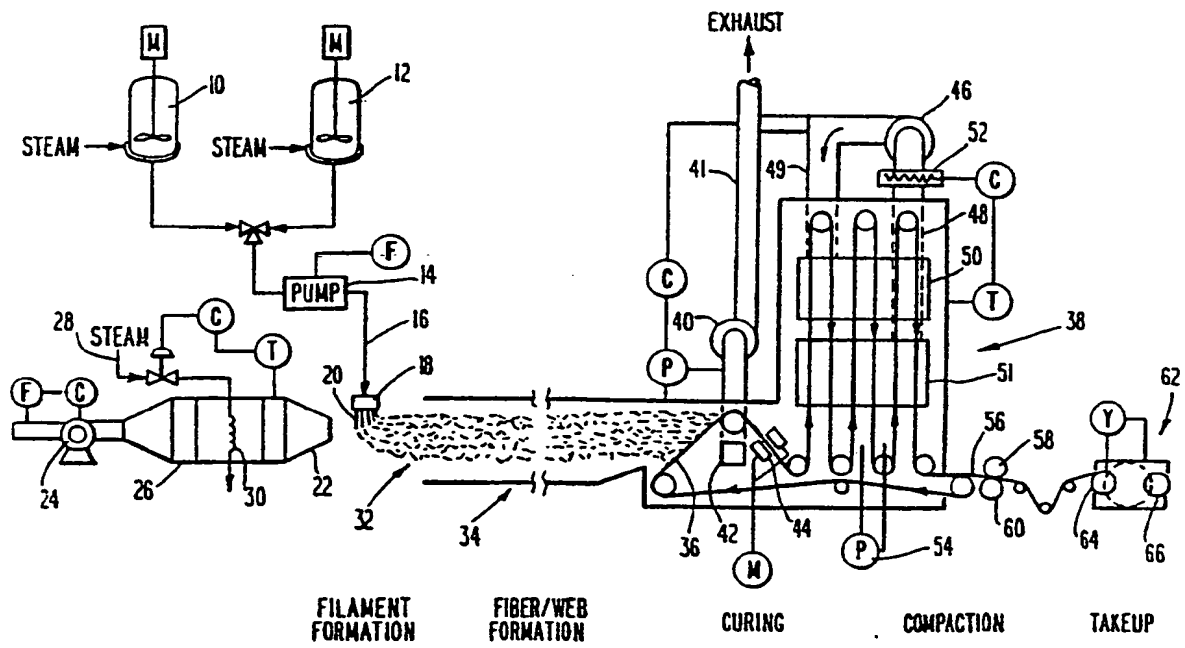
(54) Method and apparatus for production of nonwoven fibrous articles.

(57) Superabsorbent articles in the form of soft, non-woven fibrous webs are produced from aqueous, fiber-forming polymer solutions by forming the polymer into water soluble filaments in die 18, contacting the filaments with a primary air stream having a velocity effective to attenuate and to partially dry the filaments, contacting the attenuated filaments with a secondary air stream from nozzle 22 having a velocity effective to fragment the filaments into fibers and to transport the fibers to a web-forming zone 32

while also further attenuating and drying the fibers, collecting the fibers in reticulated web-form in the web-forming zone and curing the web in oven 38 to a water insoluble state. The temperature and air stream velocities are controlled with respect to ambient humidity and water content of the fiber during the fiber and web formation such that the fibers are collected without sticking. Collection is preferably on a wire belt 36 followed by transport through a curing oven to compacting rolls 58,60 and web take-up 64.

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Fig. 1





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EUROPEAN SEARCH REPORT

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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl. 4)
Y	EP-A-0 176 316 (TOA NENRYO) * Abstract, page 4, lines 25-36; pages 5-7, figure 1; claims 1,2,4,6-14 *	1,14	D 04 H 1/56 D 04 H 1/72 D 04 H 1/00
A	* Page 7, lines 15-20, figure 1 *	3-7,16,19	
Y	FR-A-1 144 586 (AMERICAN VISCOSE) * Pages 1,3-7; page 12, abstract points 1,2a,c-e,3,4 *	1,14	
A	* Figures 1,2,6, page 5 *	2,17,18,20	
A,D	US-A-4 263 241 (ALEXANDROV) * Abstract; figures 1,2; claims 1-5 *	17-20	
			TECHNICAL FIELDS SEARCHED (Int. Cl. 4)
			D 04 H A 61 L
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 14-02-1990	Examiner DURAND F.C.
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	

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